

Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$6,417
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$7,517
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$13,934
C. Fringe Benefits	\$1,424
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$15,358
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0

Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$0
H. Total Direct Costs (A Through G)	\$15,358
I. Indirect Costs*	\$10,597
J. Total Direct and Indirect Costs (H + I)	\$25,955
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$25,955
M. Cost Sharing Proposed Level	\$0

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2141382

Managing Division Abbreviation: EAR

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: Harvard College, President & Fellows of Harvard University

Awardee Address: 1033 MASSACHUSETTS AVE 5th Floor Cambridge, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (DUNS ID): 082359691

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 01/05/2022

Amendment Number: 000

Proposal Number: 2141382

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above .

Fiscal Year 2022 and 2023 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the NSF Research Terms and Conditions (RTCs) dated November 12, 2020, and NSF Agency Specific Requirements, dated November 12, 2020.

AWARD INFORMATION

Award Number (FAIN): 2141382

Award Instrument: Continuing Grant

Award Date: 01/05/2022

Award Period of Performance: Start Date: 01/15/2022 End Date: 12/31/2024

Project Title: Collaborative Research: Coupled flow-geomechanical models applied to assess earthquake triggering in tectonically active regions – The Los Angeles basin, CA

Managing Division Abbreviation: EAR

Research and Development Award: Yes

Funding Opportunity: NSF 17-554 Geophysics

Assistance Listing Number(s) and Name(s): 47.050 Geosciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$196,051
Total Intended Award Amount: \$303,673
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$196,051
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2024	\$107,622

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Institution:** Harvard University

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Institution
2141382	Y	[REDACTED]	Harvard College, President & Fellows of Harvard University
2141316	N	[REDACTED]	Massachusetts Institute of Technology

NSF CONTACT INFORMATION**Managing Grants**

**Official (Primary
Contact)**

Name: Angela A. Turner
Email: aturner@nsf.gov

Awarding Official

Name: Angela A. Turner
Email: aturner@nsf.gov

Managing Program Officer

Name: Paul Raterron
Email: praterro@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 10/04/2021, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement

which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 17-554 Geophysics.

BUDGET

A. Senior Personnel	
Senior Personnel Count	2.00
Senior Personnel Calendar Months	0.50
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$15,536
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	2.00
Post Doctoral Calendar Months	11.50
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$68,085
Other Professionals	
Other Professionals Count	1.00
Other Professionals Calendar Months	0.50
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$3,856
Graduate Students	
Graduate Students Count	2.00
Graduate Students Amount	\$6,999
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00

Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$94,476
C. Fringe Benefits	\$21,531
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$116,007
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$0
H. Total Direct Costs (A Through G)	\$116,007
I. Indirect Costs*	\$80,044
J. Total Direct and Indirect Costs (H + I)	\$196,051
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$196,051
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Facilities + administrative costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2143077

Managing Division Abbreviation: IIS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 08/25/2022

Amendment Number: 000

Proposal Number: 2143077

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

It is the grantee's responsibility to ensure that any vertebrate animal work conducted under this award has Institutional Animal Care and Use Committee (IACUC) approval, where required, that the approval be from an organization that has a current Public Health Service-approved Animal Welfare Assurance, and that such approval remains valid at all times that vertebrate animal work is conducted under the award. See the NSF PAPPG Chapter II.D.4, for additional information. This condition extends to vertebrate animal work funded via use of a subaward. Failure to comply with this condition will result in suspension and/or termination of the award.

AWARD INFORMATION

Award Number (FAIN): 2143077

Award Instrument: Continuing Grant

Award Date: 08/25/2022

Award Period of Performance: Start Date: 10/01/2022 End Date: 09/30/2027

Project Title: CAREER: Defining how the primate visual system works under naturalistic conditions

Managing Division Abbreviation: IIS

Research and Development Award: Yes

Funding Opportunity: NSF 20-525 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.070 Computer and Information Science and

Engineering

FUNDING INFORMATION

Amount Obligated by this Amendment: \$106,940
Total Intended Award Amount: \$598,566
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$106,940
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2023	\$491,626

PROJECT PERSONNEL**Principal Investigator:**

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Tianay M. Robinson
Email: trobinso@nsf.gov

Awarding Official

Name: Tianay M. Robinson
Email: trobinso@nsf.gov

Managing Program Officer

Name: Kenneth C. Whang
Email: kwhang@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 20-525 Faculty Early Career Development Program.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	0.50
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$6,278
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$42,257
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$48,535
C. Fringe Benefits	\$1,475
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$50,010
D. Equipment	\$0
E. Travel	
Domestic	\$0

International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$2,000
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$14,613
<i>Total Other Direct Costs (G)</i>	\$16,613
H. Total Direct Costs (A Through G)	\$66,623
I. Indirect Costs*	\$40,317
J. Total Direct and Indirect Costs (H + I)	\$106,940
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$106,940
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC, On-Campus Research	69.5000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2143177

Managing Division Abbreviation: DMR

Amendment Number: 001

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Increment

Amendment Date: 01/30/2023

Amendment Number: 001

Proposal Number: Not Applicable

Amendment Description:

The purpose of this amendment is to add incremental funding to the award in the amount shown below in the Funding Information section.

Except as modified by this amendment, the award conditions remain unchanged.

AWARD INFORMATION

Award Number (FAIN): 2143177

Award Instrument: Continuing Grant

Award Date: 11/19/2021

Award Period of Performance: Start Date: 02/01/2022 End Date: 01/31/2027

Project Title: CAREER: Observing topological magnetoelectric effects by magneto-optics and quantum transport

Managing Division Abbreviation: DMR

Research and Development Award: Yes

Funding Opportunity: NSF 20-525 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences (See Amendment 000 for source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$183,938
Total Intended Award Amount: \$890,180
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$318,907

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Elizabeth

Gebremedhin

Email: egebreme@nsf.gov

Phone: (703) 292-4444

Awarding Official

Name: Elizabeth Gebremedhin

Email: egebreme@nsf.gov

Managing Program Officer

Name: Mun Chan

Email: mchan@nsf.gov

Phone: (703) 292-7104

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	1.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$12,326
B. Other Personnel	
Post Doctoral Scholars	

Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$42,099
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$54,425
C. Fringe Benefits	\$2,909
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$57,334
D. Equipment	\$0
E. Travel	
Domestic	\$1,540
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$38,400
Participant Support Costs Travel	\$1,500
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	3.00
<i>Total Participant Costs (F)</i>	\$39,900

G. Other Direct Costs	
Materials Supplies	\$12,000
Publication Costs	\$2,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$16,051
<i>Total Other Direct Costs (G)</i>	\$30,051
H. Total Direct Costs (A Through G)	\$128,825
I. Indirect Costs*	\$55,113
J. Total Direct and Indirect Costs (H + I)	\$183,938
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$183,938
M. Cost Sharing Proposed Level	\$0

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2143177

Managing Division Abbreviation: DMR

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: Harvard College, President & Fellows of Harvard University

Awardee Address: 1033 MASSACHUSETTS AVE 5th Floor Cambridge, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (DUNS ID): 082359691

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 11/19/2021

Amendment Number: 000

Proposal Number: 2143177

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above .

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

AWARD INFORMATION

Award Number (FAIN): 2143177

Award Instrument: Continuing Grant

Award Date: 11/19/2021

Award Period of Performance: Start Date: 02/01/2022 End Date: 01/31/2027

Project Title: CAREER: Observing topological magnetoelectric effects by magneto-optics and quantum transport

Managing Division Abbreviation: DMR

Research and Development Award: Yes

Funding Opportunity: NSF 20-525 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$134,969
Total Intended Award Amount: \$890,180
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$134,969
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2023	\$183,938
2024	\$187,117
2025	\$190,392
2026	\$193,764

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Institution: Harvard University

NSF CONTACT INFORMATION**Managing Grants Official**

(Primary Contact)

Name: Elizabeth

Gebremedhin

Email: egebreme@nsf.gov

Awarding Official

Name: Elizabeth Gebremedhin

Email: egebreme@nsf.gov

Managing Program Officer

Name: Tom N Oder

Email: toder@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 10/04/2021, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 20-525 Faculty Early Career Development Program.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	1.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$11,967
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$40,873
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$52,840
C. Fringe Benefits	\$2,824
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$55,664
D. Equipment	\$0
E. Travel	
Domestic	\$0

International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$12,000
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$15,787
<i>Total Other Direct Costs (G)</i>	\$27,787
H. Total Direct Costs (A Through G)	\$83,451
I. Indirect Costs*	\$51,518
J. Total Direct and Indirect Costs (H + I)	\$134,969
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$134,969
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Modified Total Direct Costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2143343

Managing Division Abbreviation: SES

Amendment Number: 002

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Frwd Funded

Amendment Date: 08/22/2023

Amendment Number: 002

Proposal Number: 2342863

Amendment Description:

The purpose of this amendment is to forward fund FY 2024 and FY 2025 scheduled incremental funding to the award in the amount shown below in the Funding Information section.

Except as modified by this amendment, the award conditions remain unchanged.

AWARD INFORMATION

Award Number (FAIN): 2143343

Award Instrument: Continuing Grant

Award Date: 04/06/2022

Award Period of Performance: Start Date: 04/01/2022 End Date: 03/31/2027

Project Title: CAREER: The AI Revolution and Autocratic Institutions

Managing Division Abbreviation: SES

Research and Development Award: Yes

Funding Opportunity: NSF 20-525 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.075 Social, Behavioral, and Economic Sciences (See Amendment 000 for source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$162,156
Total Intended Award Amount: \$486,467
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$405,389

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Tyffani N. Smith

Email: tnsmith@nsf.gov

Phone: (703) 292-7046

Awarding Official

Name: Tyffani N. Smith

Email: tnsmith@nsf.gov

Managing Program Officer

Name: Kwabena Gyimah-Brempong

Email: kgyimahb@nsf.gov

Phone: (703) 292-7466

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	0.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00

Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$0
C. Fringe Benefits	\$0
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$0
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	

Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$162,156
<i>Total Other Direct Costs (G)</i>	\$162,156
H. Total Direct Costs (A Through G)	\$162,156
I. Indirect Costs*	\$0
J. Total Direct and Indirect Costs (H + I)	\$162,156
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$162,156
M. Cost Sharing Proposed Level	\$0

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2143343

Managing Division Abbreviation: SES

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 04/06/2022

Amendment Number: 000

Proposal Number: 2143343

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

It is the grantee's responsibility to ensure that any human subjects work conducted under this award has an Institutional Review Board (IRB) approval, where required, and that such approval remains valid at all times that human subjects work is conducted under the award. Failure to comply with this condition will result in suspension and/or termination of the award.

Incentive payments or gifts to participants must be made in accordance with written institutional policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

AWARD INFORMATION

Award Number (FAIN): 2143343

Award Instrument: Continuing Grant

Award Date: 04/06/2022

Award Period of Performance: Start Date: 04/01/2022 End Date: 03/31/2027

Project Title: CAREER: The AI Revolution and Autocratic Institutions

Managing Division Abbreviation: SES

Research and Development Award: Yes

Funding Opportunity: NSF 20-525 Faculty Early Career Development Program
Assistance Listing Number(s) and Name(s): 47.075 Social, Behavioral, and Economic Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$121,617
Total Intended Award Amount: \$486,467
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$121,617
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2023	\$121,616
2024	\$91,078
2025	\$71,078
2026	\$81,078

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Tyffani N. Smith
Email: tnsmith@nsf.gov

Awarding Official

Name: Willie M. Powell
Email: wpowell@nsf.gov

Managing Program Officer

Name: Kwabena Gyimah-Brempong
Email: kgyimahb@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 10/04/2021, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 20-525 Faculty Early Career Development Program.

BUDGET**A. Senior Personnel**

Senior Personnel Count	1.00
Senior Personnel Calendar Months	2.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$23,940

B. Other Personnel**Post Doctoral Scholars**

Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0

Other Professionals

Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0

Graduate Students

Graduate Students Count	0.00
Graduate Students Amount	\$0

Undergraduate Students

Undergraduate Students Count	2.00
Undergraduate Students Amount	\$29,465

Secretarial - Clerical

Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0

Other

Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$53,405

C. Fringe Benefits

<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$59,630
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D. Equipment

	\$0
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E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$307
Consultant Services	\$0
Computer Services	\$1,228
Subawards	\$0
Other	\$10,798
<i>Total Other Direct Costs (G)</i>	\$12,333
H. Total Direct Costs (A Through G)	\$71,963
I. Indirect Costs*	\$49,654
J. Total Direct and Indirect Costs (H + I)	\$121,617
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$121,617
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Modified Total Direct Costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2145925

Managing Division Abbreviation: IOS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: Harvard College, President & Fellows of Harvard University

Awardee Address: 1033 MASSACHUSETTS AVE 5th Floor Cambridge, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (DUNS ID): 082359691

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 01/07/2022

Amendment Number: 000

Proposal Number: 2145925

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 12/15/2021.

It is the grantee's responsibility to ensure that any vertebrate animal work conducted under this award has Institutional Animal Care and Use Committee (IACUC) approval, where required, that the approval be from an organization that has a current Public Health Service-approved Animal Welfare Assurance, and that such approval remains valid at all times that vertebrate animal work is conducted under the award. See the NSF PAPPG Chapter II.D.4, for additional information. This condition extends to vertebrate animal work funded via use of a subaward. Failure to comply with this condition will result in suspension and/or termination of the award.

AWARD INFORMATION

Award Number (FAIN): 2145925

Award Instrument: Continuing Grant

Award Date: 01/07/2022

Award Period of Performance: Start Date: 01/15/2022 End Date: 12/31/2026

Project Title: CAREER: Linking systemic stem cell activation to vertebrate limb regeneration

Managing Division Abbreviation: IOS

Research and Development Award: Yes

Funding Opportunity: NSF 20-525 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$262,400
Total Intended Award Amount: \$1,012,400
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$262,400
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2023	\$450,000
2024	\$100,000
2026	\$200,000

PROJECT PERSONNEL

Principal Investigator:

Email:

Institution: Harvard University

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Christine Castell
Email: ccastell@nsf.gov

Awarding Official

Name: Vanessa L. Richardson
Email: vlrichar@nsf.gov

Managing Program Officer

Name: Steven L Klein
Email: sklein@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 10/04/2021, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 20-525 Faculty Early Career Development Program.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00

Senior Personnel Calendar Months	2.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$23,647
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	1.00
Post Doctoral Calendar Months	9.60
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$45,144
Other Professionals	
Other Professionals Count	2.00
Other Professionals Calendar Months	4.80
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$20,770
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$89,561
C. Fringe Benefits	\$26,896
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$116,457
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	

Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$8,809
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$30,000
<i>Total Other Direct Costs (G)</i>	\$38,809
H. Total Direct Costs (A Through G)	\$155,266
I. Indirect Costs*	\$107,134
J. Total Direct and Indirect Costs (H + I)	\$262,400
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$262,400
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Indirect cost rate	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2147694

Managing Division Abbreviation: CNS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 06/21/2022

Amendment Number: 000

Proposal Number: 2147694

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

The project must ensure that one or more of the PI(s), senior personnel, and/or postdoctoral researchers funded under this grant will attend and actively participate in the annual SaTC PI meeting or other biennial SaTC PI meeting to be held during the term of this grant.

AWARD INFORMATION

Award Number (FAIN): 2147694

Award Instrument: Standard Grant

Award Date: 06/21/2022

Award Period of Performance: Start Date: 06/15/2022 End Date: 05/31/2026

Project Title: Collaborative Research: SaTC: CORE: Medium: Foundations of Trust-Centered Multi-Agent Distributed Coordination

Managing Division Abbreviation: CNS

Research and Development Award: Yes

Funding Opportunity: NSF 21-500 Secure and Trustworthy Cyberspace

Assistance Listing Number(s) and Name(s): 47.070 Computer and Information Science and Engineering

FUNDING INFORMATION

Amount Obligated by this Amendment: \$489,462
Total Intended Award Amount: \$489,462
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$489,462
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2147641	Y	[REDACTED]	Arizona Board of Regents Arizona State University
2147631	N	[REDACTED]	Trustees of Princeton University
2147694	N	[REDACTED]	Harvard College, President & Fellows of Harvard University

NSF CONTACT INFORMATION**Managing Grants**

Official (Primary Contact):
Name: Irene C. Sattler
Email: isattler@nsf.gov

Awarding Official
Name: Jannele L. Gosey
Email: jgosey@nsf.gov

Managing Program Officer
Name: Phillip A Regalia
Email: pregalia@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-500 Secure and Trustworthy Cyberspace.

BUDGET

A. Senior Personnel	
Senior Personnel Count	4.00
Senior Personnel Calendar Months	2.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$30,318
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	4.00
Graduate Students Amount	\$170,997
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$201,315

C. Fringe Benefits	\$7,155
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$208,470
D. Equipment	\$0
E. Travel	
Domestic	\$8,000
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$36,906
Publication Costs	\$6,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$51,115
<i>Total Other Direct Costs (G)</i>	\$94,021
H. Total Direct Costs (A Through G)	\$310,491
I. Indirect Costs*	\$178,971
J. Total Direct and Indirect Costs (H + I)	\$489,462
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$489,462
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2150290

Managing Division Abbreviation: AGS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 08/16/2022

Amendment Number: 000

Proposal Number: 2150290

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 05/27/2022, and email dated 08/16/2022.

No work with human subjects, including recruitment, may be conducted under this protocol or grant until IRB approval has been obtained.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable.

When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks. No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

Incentive payments or gifts to participants must be made in accordance with written institutional

policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

AWARD INFORMATION

Award Number (FAIN): 2150290

Award Instrument: Standard Grant

Award Date: 08/16/2022

Award Period of Performance: Start Date: 09/01/2022 End Date: 08/31/2025

Project Title: REU Site: Summer Program at Harvard in Earth and Environmental Research (SPHEER): Investigating a changing planet across multiple timescales

Managing Division Abbreviation: AGS

Research and Development Award: Yes

Funding Opportunity: NSF 19-582 Research Experiences for Undergraduates

Assistance Listing Number(s) and Name(s): 47.050 Geosciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$523,416

Total Intended Award Amount: \$523,416

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$523,416

Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

co-Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Meredith Whitty

Email: mwhitty@nsf.gov

Awarding Official

Name: Willie M. Powell

Email: wpowell@nsf.gov

Managing Program Officer

Name: Amanda S. Adams

Email: amadams@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rte.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 19-582 Research Experiences for Undergraduates.

BUDGET

A. Senior Personnel	
Senior Personnel Count	30.00
Senior Personnel Calendar Months	0.27
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$5,148
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	3.01
Other Professionals Calendar Months	0.74
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$6,662
Graduate Students	
Graduate Students Count	3.01
Graduate Students Amount	\$7,907
Undergraduate Students	
Undergraduate Students Count	5.99
Undergraduate Students	\$13,446

Amount	
Secretarial - Clerical	
Secretarial - Clerical Count	3.01
Secretarial - Clerical Amount	\$8,444
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$41,607
C. Fringe Benefits	\$9,844
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$51,451
D. Equipment	\$0
E. Travel	
Domestic	\$16,740
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$179,996
Participant Support Costs Travel	\$41,998
Participant Support Costs Subsistence	\$119,997
Participant Support Costs Other	\$0
Total Number of Participants	30.00
<i>Total Participant Costs (F)</i>	\$341,991
G. Other Direct Costs	
Materials Supplies	\$7,199
Publication Costs	\$0
Consultant Services	\$13,499
Computer Services	\$6,751
Subawards	\$0
Other	\$11,716
<i>Total Other Direct Costs (G)</i>	\$39,165
H. Total Direct Costs (A Through G)	\$449,347
I. Indirect Costs*	\$74,069
J. Total Direct and Indirect Costs (H + I)	\$523,416
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$523,416
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2150813

Managing Division Abbreviation: BCS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 06/10/2022

Amendment Number: 000

Proposal Number: 2150813

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2150813

Award Instrument: Standard Grant

Award Date: 06/10/2022

Award Period of Performance: Start Date: 07/01/2022 End Date: 06/30/2025

Project Title: Collaborative Research: Reconstructing Classic Genetic and Social Kinship Networks

Managing Division Abbreviation: BCS

Research and Development Award: Yes

Funding Opportunity: PD 98-1391 Archaeology and Archaeometry

Assistance Listing Number(s) and Name(s): 47.075 Social, Behavioral, and Economic Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$261,102

Total Intended Award Amount: \$261,102

Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$261,102
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2150813	Y	[REDACTED]	Harvard College, President & Fellows of Harvard University
2150814	N	[REDACTED]	University of California, Santa Barbara

NSF CONTACT INFORMATION

Managing Grants

Official (Primary Contact)

Name: Tyffani N. Smith
Email: tnsmith@nsf.gov

Awarding Official

Name: Willie M. Powell
Email: wpowell@nsf.gov

Managing Program Officer

Name: John E. Yellen
Email: jyellen@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	2.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	2.00
Post Doctoral Calendar Months	24.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$103,530
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$103,530
C. Fringe Benefits	\$25,779
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$129,309
D. Equipment	\$0
E. Travel	
Domestic	\$1,000

International	\$8,480
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$13,959
Publication Costs	\$1,750
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$15,709
H. Total Direct Costs (A Through G)	\$154,498
I. Indirect Costs*	\$106,604
J. Total Direct and Indirect Costs (H + I)	\$261,102
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$261,102
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Indirect Costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2151294

Managing Division Abbreviation: MCB

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 06/02/2022

Amendment Number: 000

Proposal Number: 2151294

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2151294

Award Instrument: Standard Grant

Award Date: 06/02/2022

Award Period of Performance: Start Date: 06/15/2022 End Date: 05/31/2025

Project Title: Remote homology detection with evolutionary profile HMMs

Managing Division Abbreviation: MCB

Research and Development Award: Yes

Funding Opportunity: PD 18-7334 Mathematical Biology

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$665,188

Total Intended Award Amount: \$665,188

Total Approved Cost Share or Matching Amount: \$0**Total Amount Obligated to Date:** \$665,188**Expenditure Limitation:** Not Applicable**PROJECT PERSONNEL****Principal Investigator:****Email:****Organization:** PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE**NSF CONTACT INFORMATION****Managing Grants Official**

(Primary Contact)

Name: Staci Jenkins**Email:** sjenkins@nsf.gov**Awarding Official****Name:** Staci Jenkins**Email:** sjenkins@nsf.gov**Managing Program Officer****Name:** Arcady R. Mushegian**Email:** amushegi@nsf.gov**GENERAL TERMS AND CONDITIONS**

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	6.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$82,500
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	3.00
Post Doctoral Calendar Months	36.00

Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$185,454
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$267,954
C. Fringe Benefits	\$65,648
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$333,602
D. Equipment	\$0
E. Travel	
Domestic	\$12,000
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$39,000

Publication Costs	\$9,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$48,000
H. Total Direct Costs (A Through G)	\$393,602
I. Indirect Costs*	\$271,586
J. Total Direct and Indirect Costs (H + I)	\$665,188
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$665,188
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2152149

Managing Division Abbreviation: DMS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 07/13/2022

Amendment Number: 000

Proposal Number: 2152149

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by the NSF Program Office.

AWARD INFORMATION

Award Number (FAIN): 2152149

Award Instrument: Standard Grant

Award Date: 07/13/2022

Award Period of Performance: Start Date: 07/15/2022 End Date: 06/30/2025

Project Title: FRG: Collaborative Research: Definability and Computability over Arithmetically Significant Fields

Managing Division Abbreviation: DMS

Research and Development Award: Yes

Funding Opportunity: NSF 16-577 Focused Research Groups in the Mathematical Sciences

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$203,163

Total Intended Award Amount: \$203,163
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$203,163
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2152304	Y	[REDACTED]	University of Pennsylvania
2152095	N	[REDACTED]	George Washington University
2152098	N	[REDACTED]	East Carolina University
2152149	N	[REDACTED]	Harvard College, President & Fellows of Harvard University
2152182	N	[REDACTED]	Ohio State University
2152262	N	[REDACTED]	University of California, Irvine

NSF CONTACT INFORMATION

Managing Grants Official (Primary Contact) Name: Lynda Kummelt Email: lkummelt@nsf.gov	Awarding Official Name: Aprile N Roberson Email: aroberson@nsf.gov	Managing Program Officer Name: Adriana Salerno Email: asalerno@nsf.gov
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GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rte.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 16-577 Focused Research Groups in the Mathematical Sciences.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	3.00
Senior Personnel Amount	\$83,062
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students	\$0

Amount	
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$83,062
C. Fringe Benefits	\$19,602
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$102,664
D. Equipment	\$0
E. Travel	
Domestic	\$9,000
International	\$8,550
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$0
H. Total Direct Costs (A Through G)	\$120,214
I. Indirect Costs*	\$82,949
J. Total Direct and Indirect Costs (H + I)	\$203,163
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$203,163
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2152991

Managing Division Abbreviation: DMS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 03/29/2022

Amendment Number: 000

Proposal Number: 2152991

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 03/20/2022.

AWARD INFORMATION

Award Number (FAIN): 2152991

Award Instrument: Continuing Grant

Award Date: 03/29/2022

Award Period of Performance: Start Date: 07/01/2022 End Date: 06/30/2026

Project Title: Interactions of Combinatorics and Physics

Managing Division Abbreviation: DMS

Research and Development Award: Yes

Funding Opportunity: PD 18-7970 Combinatorics

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$101,934

Total Intended Award Amount: \$440,000

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$101,934

Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2023	\$99,705
2024	\$238,361

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Lynda Kummelt

Email: lkummelt@nsf.gov

Awarding Official

Name: LeVar R. Farrior

Email: lfarrior@nsf.gov

Managing Program Officer

Name: Stefaan Guido De
Winter

Email: sgdwint@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 10/04/2021, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	1.00

Senior Personnel Amount	\$32,754
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$10,969
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$43,723
C. Fringe Benefits	\$7,730
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$51,453
D. Equipment	\$0
E. Travel	
Domestic	\$3,000
International	\$3,000
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0

Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$2,863
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$2,863
H. Total Direct Costs (A Through G)	\$60,316
I. Indirect Costs*	\$41,618
J. Total Direct and Indirect Costs (H + I)	\$101,934
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$101,934
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2153335

Managing Division Abbreviation: DMS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 05/23/2022

Amendment Number: 000

Proposal Number: 2153335

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 04/28/2022.

AWARD INFORMATION

Award Number (FAIN): 2153335

Award Instrument: Standard Grant

Award Date: 05/23/2022

Award Period of Performance: Start Date: 07/01/2022 End Date: 06/30/2025

Project Title: Random Matrices, Random Schrödinger Operators, and Applications

Managing Division Abbreviation: DMS

Research and Development Award: Yes

Funding Opportunity: PD 18-1263 Probability

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$330,000

Total Intended Award Amount: \$330,000

Total Approved Cost Share or Matching Amount: \$0**Total Amount Obligated to Date:** \$330,000**Expenditure Limitation:** Not Applicable**PROJECT PERSONNEL****Principal Investigator:****Email****Organization:** PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE**NSF CONTACT INFORMATION****Managing Grants Official**

(Primary Contact)

Name: Lynda Kummelt**Email:** lkummelt@nsf.gov**Awarding Official****Name:** Aprile N Roberson**Email:** aroberso@nsf.gov**Managing Program Officer****Name:** Pawel Jan Hitczenko**Email:** phitczen@nsf.gov**GENERAL TERMS AND CONDITIONS**

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	3.00
Senior Personnel Amount	\$108,314
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00

Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$51,571
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$159,885
C. Fringe Benefits	\$25,562
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$185,447
D. Equipment	\$0
E. Travel	
Domestic	\$3,620
International	\$6,200
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0

Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$0
H. Total Direct Costs (A Through G)	\$195,267
I. Indirect Costs*	\$134,733
J. Total Direct and Indirect Costs (H + I)	\$330,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$330,000
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2154245

Managing Division Abbreviation: DEB

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 03/15/2022

Amendment Number: 000

Proposal Number: 2154245

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2154245

Award Instrument: Standard Grant

Award Date: 03/15/2022

Award Period of Performance: Start Date: 07/01/2022 End Date: 06/30/2025

Project Title: Collaborative Research: PurSUiT: Understanding the Neotropical Velvet Worms (Onychophora, Peripatidae, Neoplatida), a Cretaceous Radiation of Terrestrial Panarthropods

Managing Division Abbreviation: DEB

Research and Development Award: Yes

Funding Opportunity: NSF 21-504 Division of Environmental Biology (core programs)

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$809,585

Total Intended Award Amount: \$809,585
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$809,585
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2154245	Y	[REDACTED]	Harvard College, President & Fellows of Harvard University
2154246	N	[REDACTED]	George Washington University

NSF CONTACT INFORMATION

Managing Grants

Official (Primary Contact)

Name: Staci Jenkins

Email: sjenkins@nsf.gov

Awarding Official

Name: Deidre R. Coates

Email: dcoates@nsf.gov

Managing Program Officer

Name: Maureen M Kearney

Email: mkearney@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 10/04/2021, available at [https://www.nsf.gov/awards/managing/rtc.jsp](https://www.nsf.gov/awards/managing rtc.jsp).

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-504 Division of Environmental Biology (core programs).

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	3.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$88,292
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	1.00
Post Doctoral Calendar Months	36.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$160,727
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	1.00
Undergraduate Students Amount	\$15,000
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$264,019
C. Fringe Benefits	\$62,028
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$326,047
D. Equipment	\$21,807
E. Travel	
Domestic	\$14,100

International	\$32,850
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$16,875
Publication Costs	\$4,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$72,269
<i>Total Other Direct Costs (G)</i>	\$93,144
H. Total Direct Costs (A Through G)	\$487,948
I. Indirect Costs*	\$321,637
J. Total Direct and Indirect Costs (H + I)	\$809,585
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$809,585
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2200449

Managing Division Abbreviation: DMS

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 04/11/2022

Amendment Number: 000

Proposal Number: 2200449

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 03/31/2022.

AWARD INFORMATION

Award Number (FAIN): 2200449

Award Instrument: Continuing Grant

Award Date: 04/11/2022

Award Period of Performance: Start Date: 07/01/2022 End Date: 06/30/2025

Project Title: Shimura Varieties and Abelian Varieties

Managing Division Abbreviation: DMS

Research and Development Award: Yes

Funding Opportunity: PD 20-1264 Algebra and Number Theory

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$132,417

Total Intended Award Amount: \$400,000